The Oeser Company Superfund Site
Remedial Investigation Report
Bellingham, Washington
TDD: 01-03-0016

Contract: 68-S0-01-01
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Region 10

START-2

Superfund Technical Assessment and Response Team

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EXECUTIVE SUMMARY

The Oeser Company site includes an active wood-treating facility located in Bellingham, Washington, that has used organic treating solutions of creosote and pentachlorophenol (PCP) to preserve utility poles and pilings. The site which includes the facility and surrounding lands was placed on the United States Environmental Protection Agency (EPA) National Priorities List on October 27, 1997, because of known or threatened releases of hazardous substances, pollutants, or contaminants. At the direction of the EPA, a remedial investigation (RI) was initiated by the Ecology and Environment, Inc. (E & E) Superfund Technical Assessment and Response Team (START) under Contract No. 68-W6-0008 and Technical Direction Document (TDD) No. 97-08-0007 and START Contract No. 68-W6-0010 and TDD No. 09-00-09-0001; the RI has been continued under START-2 Contract No. 68-S0-01-01 and TDD No. 01-03-0016.

This RI report summarizes RI site investigation activities and presents data on the nature and extent of contamination at the site. Contaminants from wood-treating wastes (polycyclic aromatic hydrocarbons [PAHs; the majority of compounds that make up creosote], PCP, and dioxin [a contaminant found in PCP treating solutions], and other organic compounds) were identified in surface and subsurface soil, shallow and deep groundwater, air, surface water, and sediment. Concentrations of some chemicals exceeded preliminary risk-based screening levels in a portion of all samples collected from all media.

Contaminants were identified in areas outside of the boundaries of The Oeser Company facility. Surface water and sediment in Little Squalicum Creek, an open drainage channel for untreated stormwater to Bellingham Bay, appear to be the most impacted media in off-facility areas. The Oeser Company releases stormwater from its facility to Little Squalicum Creek under a National Pollutant Discharge Elimination System (NPDES) permit. Current impacts to air appear to be related primarily to active operations at the facility. The facility is a registered source with the Northwest Air Pollution Authority (NWAPA).

Contaminants detected in nearby off-facility residential areas are similar in both nature and concentration to area background levels of these contaminants found in areas of Bellingham, Washington, impacted by other residential, commercial, and industrial sources. The source of dioxin contamination

present in nearby residential areas is not attributable to The Oeser Company operations based on congener profile analysis.

In addition to active operations, surface and subsurface soil at the facility are ongoing sources of contamination to air and groundwater. Soil contamination is not continuous either horizontally or vertically beneath the majority of the 26-acre facility, but is located primarily around the main operational areas of the facility where it extends to depths greater than 20 feet below ground surface (bgs). Contaminants were also found in creek sediments and creek bank soils, in addition to creek surface water; however, sediment toxicity tests did not indicate a hazard to benthic life.

No evidence of facility-related contamination by metals was found which is consistent with historical information indicating that inorganic wood-treating solutions had not been utilized at the facility.

Data collected during the RI were used to conduct a human health risk assessment (HHRA) and an ecological risk assessment (ERA); both reports are included as appendices M and N to this report, respectively. For the HHRA, current and future exposure scenarios were evaluated for on-site workers, on- and off-site residents, and off-site recreational visitors. The potential excess lifetime cancer risks and potential noncarcinogenic hazard indices (HIs) for the reasonable maximum exposure (RME) case are summarized in this RI report. Risks were greatest for on-facility workers and potential future on-facility residents. The ERA included a sediment toxicity test for benthic invertebrates in Little Squalicum Creek; a baseline screening of contaminants of potential concern (COPCs) against benchmarks for plants and soil invertebrates; and an exposure assessment for songbird and small mammal populations. Results of the ERA indicate that overall, facility-related chemicals do not appear to pose a serious threat to ecological receptors that use the creek area and south slope. The results of the HHRA and ERA will be used to guide decisions regarding site remedial alternatives.